Appl. No. 10/016,853 Amdt. Dated January 23, 2006 Reply to Office action of February 3, 2005 Attorney Docket No. P14738-US1 EUS/J/P/06-1015

REMARKS/ARGUMENTS

1.) Withdrawal of prior Final Office Action

The Applicants thank the Examiner for withdrawing the finality of the prior office action.

2.) Claim Rejections - 35 U.S.C. § 103(a)

The Examiner has, again, rejected claims 1-2, 5-6, 9-10 and 13-14 as being unpatentable over Granberg (US 6,101,382) in view of Tomoike (JP 410013945A), and claims 3-4, 7-8, 11-12 and 15-16 as being unpatentable over Granberg in view of Tomoike and further in view of Grootwassink (US 6725037). The Applicants traverse the rejections.

With respect to claims 1, 5, 9 and 13, the Examiner recognizes that Granberg fails to disclose certain limitations common to each of those claims. Recognizing the deficiencies of Granberg, the Examiner states that all of the limitations not disclosed in Granberg are disclosed in Tomoike. The Examiner asserts that Tomoike discloses the limitation "assigning an authentication code to said roaming number, said response including said authentication code, receiving said authentication code at HLR and sending said authentication code from HLR to said GMSC (see abstract, whole document translated in English and drawings 2-5)." The Examiner's assertions as to what is taught by Tomoike are not supportable by a reading of Tomoike, and the Examiner has not pointed to any specific portions of Tomoike that disclose the claimed limitations. In particular, Tomoike fails to disclose "assigning an authentication code to [a] roaming number." What Tomoike describes in the abstract is 1) authenticating a roaming terminal and, then, 2) sending a roaming number to the terminal. This is particularly clear from the statement in the Tomoike abstract that. "[w]hen authentication [of the terminal 10] is completed, the network 20 acquires a roaming number and notifies it to the terminal 10 and the network 30." Because Tomoike discloses acquiring a roaming number only after the mobile terminal is authenticated, it is without question that Tomoike fails to teach assigning an authentication code to a roaming number, as recited in Applicants' claim 1.

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In contrast to the apparent teachings of Tomoike, the authentication code utilized in Applicants' invention is <u>not</u> used to authenticate a mobile terminal, but is used to prevent the unauthorized use of roaming numbers. The invention embodies a process by which it can be assured that a call to a roaming number associated with an MSC is not simply a direct call to the roaming number, but is in fact a call to a B subscriber Mobile Station to which the MSC can assign the roaming number.

Claim 1 recites:

 A method for preventing unauthorized use of roaming numbers in a wireless telecommunications system, said method comprising the steps of:

receiving a call request for a mobile terminal at a Gateway Mobile Switching Center (GMSC);

sending a request for routing information from said GMSC to a Home Location Register (HLR) associated with said mobile terminal:

sending a request for a roaming number from said HLR to the Mobile Switching Center (MSC) associated with the roaming area in which said mobile terminal is geographically located;

allocating, by said MSC, a roaming number for said mobile terminal:

assigning, by said MSC, an authentication code to said roaming number;

sending a response to said request for roaming number from said MSC to said HLR, said response including said roaming number and said authentication code;

receiving said roaming number and said authentication code at said HLR:

sending said roaming number and said authentication code from said HLR to said GMSC;

sending a call setup request from said GMSC to said MSC, said call setup request including said roaming number and said authentication code;

confirming, by said MSC, said authentication code in said call setup request; and,

if said authentication code for said roaming number is confirmed by said MSC, completing said call request to said mobile terminal. (emphasis added)

Granberg and Tomoike fail to disclose, either individually or in combination, each and every limitation of claim 1. In particular, the Examiner has pointed to no teaching

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wherein: 1) an MSC assigns an authentication code to a roaming number, 2) an MSC sends a response to a request for a roaming number to an HLR, wherein the response includes a roaming number and an authentication code for that roaming number, 3) an HLR sends a roaming number and an authentication code for that roaming number to a GMSC, 4) a call setup request is sent from a GMSC to an MSC, wherein the call setup request includes a roaming number assigned by that MSC and the authentication code for that roaming number, or 5) confirming by the MSC the authentication code in the call setup request and, if the authentication code for the roaming number is confirmed by the MSC, completing the call request to the mobile terminal. Accordingly, the Examiner has not established a prima facie case of obvious of claim 1 in view of Granberg and Tomoike.

Whereas claims 5, 9 and 13 include limitations analogous to those of claim 1, those claims are also not obvious in view of Granberg and Tomoike. Furthermore, whereas claims 2-4, 6-8, 10-12 and 14-16 are dependent from claims 1, 5, 9 and 13, respectively, and include the limitations thereof, those claims are also not obvious.

3.) Subsequent Examiner Actions

The undersigned was informed on January 19, 2006, by the Examiner's supervisor, Joe Field, that the Examiner's next Office Action would be non-final and would include explicit identification of the specific teachings of any references that the Examiner may rely on. The Applicants will very much appreciate the Examiner's careful consideration of Applicant's arguments presented herein in his reconsideration, particularly in view of Tomoike.

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CONCLUSION

In view of the foregoing remarks, the Applicants believe all of the claims currently pending in the Application to be in a condition for allowance. The Applicants, therefore, respectfully request that the Examiner withdraw all rejections and issue a Notice of Allowance for claims 1-16.

<u>The Applicants request a telephonic interview</u> if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted.

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Date: January 23, 2006

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